

**CALIFORNIA WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**ORDER NO. 97-15
WASTE DISCHARGE REQUIREMENTS
FOR POST-CLOSURE MAINTENANCE OF
COUNTY OF SAN DIEGO
BONSALL SANITARY LANDFILL
SAN DIEGO COUNTY**

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

BACKGROUND

1. On June 15, 1966, this Regional Board adopted Resolution 66-R16, "A Resolution Prescribing Requirements Regulating the Discharge of Wastes Into the Bonsall Sanitary Landfill Operated by the County of San Diego". Resolution 66-R16 established requirements for the discharge of Type 2 and Type 3 wastes to the Bonsall Sanitary Landfill.
2. The Bonsall Sanitary Landfill operated from 1968 to 1985 as a Class II landfill. Approximately 1.8 million tons of residential and commercial refuse, nondecomposable inert solids, occasionally sewage sludge and dead animals were disposed of into the landfill during its active years of operation.
3. The County of San Diego prepared a Closure Report for the landfill dated September 23, 1986 in accordance with Section 2597 of California Code of Regulations, Title 23, Division 3, Chapter 15 (23 CCR). The Closure Report describes the final cover of the landfill. The foundation layer consists of three feet of native soil overlain by six inches of Otay bentonite clay (permeability range from 10^{-6} to 10^{-11} cm/sec). The top layer of the final cover consists of one foot of a native soil-gravel/sludge mixture which was hydroseeded with native plants of the Gopher Canyon area. Based on the technical information provided in the Closure Report, the Regional Board has determined that Bonsall Sanitary Landfill is closed in accordance with 23 CCR Article 8.
4. The County of San Diego has designated the Bonsall Sanitary Landfill area as public/semipublic. A local model airplane club also uses the site. The County of San Diego is responsible for the overall maintenance of the landfill.
5. As part of the FY 1996/97 **Waste Discharge Order Update Program**, Resolution 66-R16 has been reviewed by Regional Water Quality Control Board staff as required by Section 13263 of the California Water Code. This Order updates the findings and requirements of Resolution 66-R16 and includes a monitoring and reporting program in order to address current State and Regional Board policies, regulations, and the

current status of the project. Information reviewed and incorporated in this update include technical information contained in the Closure Report, ground water monitoring reports and the Solid Waste Assessment Test Report.

Closure Findings

6. Nonhazardous solid waste landfills (which include former Class II-2 landfills, former Class III landfills and burn dumps) have been regulated by the State Water Resources Control Board and the Regional Boards since the 1960's. The applicable regulations governing landfills is California Code of Regulations, Title 23, Division 3, Chapter 15, **Discharges of Waste to Land** (23 CCR).
7. Pursuant to 23 CCR 2510 (g), landfills which are closed, abandoned, or inactive on the effective date of these regulations (November 1984) are not specifically required to be closed in accordance with Article 8 requirements. However, these landfills are subject to post-closure maintenance requirements in accordance with 23 CCR 2581(b) and (c).
8. Pursuant to 23 CCR Section 2510 (g), persons responsible for discharges at landfills which are closed, abandoned, or inactive may be required to develop and implement a monitoring program. If water quality impairment is found, such persons may be required to develop and implement a corrective action program based on the provisions of Chapter 15.

Water Quality and Site Investigations

9. The Bonsall Sanitary Landfill is subject to the requirements of California Water Code, Section 13273, which requires the operator to perform a solid waste water quality assessment test (SWAT report) to determine if the site is leaking hazardous waste to surface or ground water. The County of San Diego submitted a SWAT report on February 11, 1993.
10. By letter dated November 12, 1993, Regional Board staff determined the SWAT investigation to be complete in accordance with CWC 13273. The SWAT report indicated that 14 volatile organic compounds (VOCs) were detected in ground water beneath the site. Seven VOCs were above the Maximum Contaminant Level. Higher concentrations of several inorganic constituents included total dissolved solids, metals and nitrate. The SWAT report suggests that contamination may be from landfill gas migration.
11. The County of San Diego has initiated an evaluation monitoring program which includes the addition of two background monitoring wells and two downgradient monitoring wells to determine the extent of contamination downgradient of the landfill. The well locations were based on a photolineament analysis, field mapping and geophysical surveys. These wells are to be drilled as soon as the County of San

Diego obtains right-of-entry to the adjacent properties.

Site Description

12. The Bonsall Sanitary landfill lies on a saddle formed between two discontinuous northwest-trending ridges. Slopes around the site are generally moderate to steep. The land surface is terraced and slopes at a maximum of 2½:1 toward the northwest and the southeast, away from the center of the landfill.
13. The landfill is underlain by weathered to fresh metavolcanic bedrock. Ground water within the vicinity of the landfill occurs within the bedrock and valley fill alluvium from less than 20 feet to more than 100 feet below ground surface. Ground water migrates over a poorly defined fresh bedrock contact and through fractures, flowing both westerly and easterly-northeasterly away from the landfill.
14. Surface waters originating upstream of the landfill are intercepted and diverted from the landfill by benches, corrugated metal pipes and flumes designed to accommodate runoff from a 100-year storm.

Water Quality Control Plan

15. The **Water Quality Control Plan Report, San Diego Basin (9)** (hereinafter Basin Plan), was adopted by this Regional Board on September 8, 1994, and subsequently approved by the State Water Resources Control Board (State Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Board and approved by the State Board. The Basin Plan designates beneficial uses and narrative and numerical water quality objectives, and prohibitions which are applicable to the discharges regulated under this Order.
16. The Bonsall Sanitary Landfill is located within the Bonsall Hydrologic Subarea of the Lower San Luis Hydrologic Area of the San Luis Rey Hydrologic Unit, and is located 1½ miles west of Interstate 15, on the south side of Gopher Canyon Road, east of Twin Oaks Valley Road, on the north half of the southeast quarter of Section 3, T11S, R3W of the San Bernardino Base and Meridian (SBB&M) co-ordinate system.
17. The Basin Plan identifies the following beneficial uses of inland surface and ground waters of the Bonsall Hydrologic Subarea (3.12) of the San Luis Rey Hydrologic Unit:
 - a. Municipal and domestic supply
 - b. Agricultural supply
 - c. Industrial service supply
18. The Basin Plan contains the following prohibitions which are applicable to the inactive landfills:

- a. "The dumping, deposition or discharge of waste directly into waters of the state or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the Regional Board."
 - b. "The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the Regional Board."
 - c. "The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited."
 - d. "The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited."
 - e. "The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited."
19. The Basin Plan established the following water quality objectives for water of the Bonsall Hydrologic Subarea (3.12):

Constituent	Surface Water	Ground Water
Total Dissolved Solids	500 mg/l	1500 ^{c,d} mg/l
Chloride	250 mg/l	500 ^{c,d} mg/l
Percent Sodium	60%	60%
Sulfate	250 mg/l	500 ^{c,d} mg/l
Nitrate (as NO ₃)	---	45 ^{c,d} mg/l
Nitrogen & Phosphorus	a	---
Iron	0.3 mg/l	0.85 ^{c,d} mg/l
Manganese	0.05 mg/l	0.15 ^{c,d} mg/l
Methylene Blue Active Substances	0.5 mg/l	0.5 ^d mg/l
Boron	0.75 mg/l	0.75 ^{c,d} mg/l
Odor	none	none
Turbidity	20 NTU	5 NTU
Color	20 Units	15 ^d Units
Fluoride	1.0 mg/l	1.0 ^d mg/l

The above concentrations not to be exceeded more than 10% of the time.

Note: mg/l = milligrams per liter

NTU = Nephelometric Turbidity Units

^aConcentrations of nitrogen and phosphorus, by themselves or in combinations with other nutrients, shall be maintained at levels below those which stimulate algae and emergent plant growth. Threshold total Phosphorus (P) concentrations shall not exceed 0.05 mg/L in any stream at the point where it enters any standing body of water, nor 0.025 mg/L in any standing body of water. A desired goal in order to prevent plant nuisances in streams and other flowing waters appears to be 0.1 mg/L total P. These values are not to be exceeded more than 10 percent of the time unless studies of the specific water body in question clearly show that water quality objective changes are permissible and changes are approved by the Regional Board. Analogous threshold values have not been set for nitrogen compounds; however, natural ratios of nitrogen to phosphorus are to be determined by surveillance and monitoring and upheld. If data are lacking, a ratio of N:P = 10:1 shall be used.

^cThe recommended plan would allow for measurable degradation of ground water in this basin to permit continued agricultural land use. Point sources, however, would be controlled to achieve effluent quality corresponding to the tabulated numerical values. In future years demineralization may be used to treat ground water to the desired quality prior to use.

^dA portion of the Upper Mission Basin is being considered as an underground potable water storage reservoir for treated imported water. the area is located north of Highway 76 on the boundary of hydrologic subareas 3.11 and 3.12. If this program is adopted, local objectives approaching the quality of the imported water would be set and rigorously pursued.

CEQA and Other Legal References

19. The Bonsall Sanitary Landfill is an existing facility and as such are exempt from the provisions of the California Environmental Quality Act in accordance with Title 14, California Code of Regulations, Chapter 3, Article 19, Section 15301.
20. The Regional Board, in establishing the requirements contained herein, considered factors including, but not limited to the following:
 - a. Past, present, and probable future beneficial uses of water.

- b. Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
 - c. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
 - d. Economic considerations.
 - e. The need for developing housing within the region.
 - f. The need to develop and use recycled water.
 - g. Beneficial uses to be protected and water quality objectives reasonably required for that purpose.
 - h. Other waste discharges.
 - i. The need to prevent nuisance.
21. The Regional Board has considered all water resource related environmental factors associated with the discharge of waste associated with the Bonsall Sanitary Landfill.
22. The Regional Board has notified interested agencies and all know interested parties of its intent to issue post-closure maintenance requirements for Bonsall Sanitary Landfill.
23. The Regional Board in a public meeting heard and considered all comments pertaining to post-closure maintenance of Bonsall Sanitary Landfill.

IT IS HEREBY ORDERED, That the County of San Diego (hereinafter discharger), in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. PROHIBITIONS

- 1. Discharges of wastes to lands which have not been specifically described to the Regional Board and for which valid Waste Discharge Requirements are not in force are prohibited.
- 2. The discharge of waste shall not:
 - a. Cause the occurrence of coliform or pathogenic organisms in waters pumped from the basin;
 - b. Cause the occurrence of objectionable tastes and odors in water pumped from

- the basin;
 - c. Cause waters pumped from the basin to foam;
 - d. Cause the presence of toxic materials in waters pumped from the basin;
 - e. Cause the pH of waters pumped from the basin to fall below 6.0 or rise above 9.0;
 - f. Cause this Regional Board's objectives for the ground or surface waters as established in the Basin Plan, to be exceeded; and
 - g. Cause pollution, contamination or nuisance or adversely affect beneficial uses of the ground or surface waters as established in the Basin Plan.
3. Odors, vectors, and other nuisances of waste origin beyond the limits of the landfill site are prohibited.
 4. The discharge of waste to surface drainage courses or to usable ground water is prohibited.
 5. Disposal of liquid condensate generated by the extraction of landfill gas at the site is prohibited.
 6. Basin Plan prohibitions shall not be violated.

B. POST-CLOSURE MAINTENANCE SPECIFICATIONS

1. Annually, prior to the anticipated rainy season but not later than **October 31**, any necessary erosion control measures shall be implemented, and any necessary construction, maintenance, or repairs of precipitation and drainage control facilities shall be completed to prevent erosion, ponding, flooding, or to prevent surface drainage from contacting or percolating through wastes at the facility.
2. The landfilled areas shall be adequately protected from any washout, erosion of wastes or cover material. The surface drainage system shall be designed to adequately handle the rainfall from a 100-year 24 hour storm event.
3. Surface drainage from the landfill is subject to State Board Order No. 91-13-DWQ, National Pollutant Discharge Elimination System (NPDES) General Permit No. CAS000001, "Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities".
4. The structural integrity and effectiveness of all containment structures and the existing cover shall be maintained as necessary to correct the effects of settlement or other adverse factors.

5. Vegetation used at the site shall be selected to require minimum irrigation and maintenance, and shall not impair the integrity of containment structures including the existing cover. Landscaping overlaying the landfill portion of the site shall be shallow rooted native grasses and shrubs suited for inland valleys of Southern California.
6. The migration of landfill gas from the site shall be controlled as necessary to ensure that landfill gases and gas condensate are not discharged to surface waters or ground waters. Condensate shall be collected and removed from the site.

C. PROVISIONS

1. GENERAL PROVISION

Neither the treatment nor the discharge of waste shall create a pollution, contamination, or nuisance, as defined by Section 13050 of the California Water Code.

2. DUTY TO COMPLY

The discharger shall comply with applicable provisions of Chapter 15 and all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for: (a) enforcement action; (b) termination, revocation and reissuance, or modification of this Order; or (c) denial of a Report of Waste Discharge in application for new or revised Waste Discharge Requirements.

3. COMPLIANCE

In an enforcement action, it shall not be a defense for the discharger to say, it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this Order.

4. CORRECTIVE ACTION

The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

5. PROPER OPERATION AND MAINTENANCE

The discharger shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the discharger to achieve compliance with conditions of this Order. Proper operation and maintenance includes effective performance, adequate laboratory and

process controls including appropriate quality assurance procedures.

6. PERMIT REVISION

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this Order;
- b. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

The filing of a request by the discharger for the modification, revocation and reissuance, or termination of this Order, or notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

7. CHANGE IN OWNERSHIP

This Order is not transferable to any person except after notice to the Executive Officer. The Regional Board may require modification or revocation and reissuance of this Order to, change the name of the discharger and incorporate such other requirements as may be necessary under the California Water Code. The discharger shall submit notice of any proposed transfer of this Order's responsibility and coverage to a new discharger as described under Reporting Requirement E.3.

8. PROPERTY RIGHTS

This Order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the discharger from liability under federal, state, or local laws, nor create a vested right for the owner and operator to continue the regulated activity.

9. ENTRY AND INSPECTION

The discharger shall allow the Regional Board, or an authorized representative upon the presentation of credentials and other documents as may be required by law to:

- a. Enter upon the discharger premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Order;

- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

10. PERMIT REPOSITORY

A copy of this Order shall be maintained at the local offices of the discharger and shall be available to operating personnel at all times.

11. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.

12. ENGINEERED ALTERNATIVES TO CHAPTER 15

Alternatives to construction or prescriptive standards shall be subject to the approval of the Regional Board and shall meet the conditions established in 23 CCR Section 2510 (b) and (c) established in Chapter 15 throughout the post-closure period.

13. EFFECTIVE DATE

This Order becomes effective on the date of adoption by the Regional Board. This Order supersedes Resolution 66-R16.

D. REPORTING REQUIREMENTS

1. CHANGE IN DISCHARGE

The discharger shall file the following reports in accordance with the following schedule:

a. Report of Waste Discharge

The discharger shall file a new Report of Waste Discharge at least 120 days prior to the following:

- 1) Significant change in post-closure maintenance activities which would significantly alter existing drainage patterns and slope configurations, or pose a potential threat to the integrity of the site;
- 2) Change in land use other than as described in the findings of this Order;
- 3) Significant change in disposal area, e.g. excavation and relocation of waste on site; or
- 4) Any planned change in the regulated facility or activity which may result in noncompliance with this Order.

b. Workplan

The discharger shall submit a workplan at least 30 days prior to any maintenance activities that could alter existing surface drainage patterns or change existing slope configurations. These activities may include, but not be limited to, significant grading activities, the importation of fill material, the design and installation of soil borings, ground water monitoring wells and other devices for site investigation purposes.

c. Written Notification

The discharger shall provide written notification at least 2 working days prior to any maintenance activities that are minor and/or routine in nature, do not add a significant amount of water, do not inhibit drainage, have limited potential for impacts to beneficial use of water, and will not interfere with future routine maintenance. These activities may include, but not be limited to:

- 1) routine maintenance grading and dust control;
- 2) landscaping with minimal/no water application;
- 3) gas surveys with temporary probes; or
- 4) replacement/removal of gas collection wells.

2. GENERAL REPORTING REQUIREMENT

The discharger shall furnish to the Executive Officer, within a reasonable time, any information which the Executive Officer may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The discharger shall also furnish to the Executive Officer upon request, copies of records required to be kept by this Order.

3. CHANGE IN OWNERSHIP

The discharger shall notify the Executive Officer, in writing, at least 30 days in advance of any proposed transfer of this Order's responsibility and coverage between the current owner and new owner for construction, operation, closure, or post-closure maintenance of a landfill. This agreement shall include an acknowledgement that the existing owner is liable for violations up to the transfer date and that the new owner is liable from the transfer date on. The agreement shall include an acknowledgement that the new owners shall accept responsibility for compliance with this Order which includes post-closure maintenance and a monitoring program for the landfill.

4. INCOMPLETE REPORTS

Where the discharger becomes aware that it failed to submit any relevant facts in a Report of Waste Discharge or submitted incorrect information in a Report of Waste Discharge or in any report to the Regional Board, it shall promptly submit such facts or information.

5. ENDANGERMENT OF HEALTH AND ENVIRONMENT

The discharger shall report any noncompliance which may endanger health or the environment. Any such information shall be provided verbally to the Executive Officer within 24 hours from the time the owner becomes aware of the circumstances. A written submission shall also be provided within five days of the time the owner becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected; the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, or prevent recurrence of the noncompliance. The Executive Officer, or an authorized representative, may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

6. SLOPE FAILURE

The discharger shall notify the Executive Officer immediately of any slope failure occurring in a waste management unit. Any failure which threatens the integrity of the containment features or the waste management unit shall be promptly corrected after approval of the method and schedule by the Executive Officer.

7. LANDFILL GAS

The discharger shall operate and maintain a landfill gas migration control and detection system as required by the Air Pollution Control District (APCD) and the

Local Enforcement Agency (LEA).

8. MONITORING AND REPORTING PROGRAM

The discharger shall comply with the attached Monitoring and Reporting Program No. 97-11. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 97-11.

9. REPORT DECLARATION

All applications, reports, or information submitted to the Executive Officer shall be signed and certified as follows:

- a. The Report of Waste Discharge shall be signed as follows:
 1. **For a corporation** - by a principal executive officer of at least the level of vice-president.
 2. **For a partnership or sole proprietorship** - by a general partner or the proprietor, respectively.
 3. **For a municipality, state, federal or other public agency** - by either a principal executive officer or ranking elected official.
 4. **For a military installation** - by the base commander or the person with overall responsibility for environmental matters in that branch of the military.
- b. All other reports required by this Order and other information required by the Executive Officer shall be signed by a person designated in paragraph (a) of this provision, or by a duly authorized representative of that person. An individual is a duly authorized representative only if:
 1. The authorization is made in writing by a person described in paragraph (a) of this provision;
 2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity; and
 3. The written authorization is submitted to the Executive Officer.
- c. Any person signing a document under this Section shall make the following certification:

" I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

10. REGIONAL BOARD ADDRESS

The discharger shall submit reports required under this Order and other information requested by the Executive Officer, to:

California Regional Water Quality Control Board
San Diego Region
9771 Clairemont Mesa Blvd., Suite A
San Diego, California 92124-1331

E. **Notifications**

1. U.S. EPA REVIEW

These requirements have not been officially reviewed by the United States Environmental Protection Agency and are not issued pursuant to Section 402 of the Clean Water Act.

2. CIVIL MONETARY REMEDIES

The California Water Code provides that any person who intentionally or negligently violates any Waste Discharge Requirements issued, reissued, or amended by this Regional Board is subject to administrative civil liability of up to 10 dollars per gallon of waste discharged, or if no discharge occurs, up to 1000 dollars per day of violation. The Superior Court may impose civil liability of up to 10,000 dollars per day of violation or, if a cleanup and abatement order has been issued, up to 15,000 dollars per day of violation.

3. PENALTIES FOR INVESTIGATION, MONITORING OR INSPECTION VIOLATIONS

The California Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or falsifying any information provided in the monitoring reports is guilty of a misdemeanor and may be subject to administrative civil liability of up to 1000 dollars per day of violation.

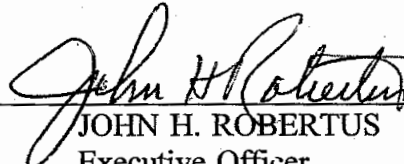
4. OTHER CLOSURE REGULATIONS

Closure of this waste management unit may be subject to regulations of the California Integrated Management Board and the San Diego County Air Pollution Control District.

5. CHAPTER 15 DEFINITIONS

Definitions of terms used in this Order shall be as set forth in California Code of Regulations Chapter 15.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on March 12, 1997.



JOHN H. ROBERTUS
Executive Officer